

## Case 3193

***Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 (Insecta, Coleoptera): proposed conservation of usage by the designation of *C. sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema***

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**Abstract.** The purpose of this application is to conserve, under Article 70.2 of the Code, the usage of the buprestid (jewel beetle) generic names *Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 by the designation of *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema*. At present *C. sumptuosa* Laporte & Gory, 1835 is the valid type species of both genera. The name *Chrysodema* refers to a genus of 100 species found in the Australasian, Oriental and eastern Palaearctic regions and *Iridotaenia* refers to a genus comprised of 80 species from the tropical African, Australian and Oriental regions.

**Keywords.** Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Chrysodema*; *Iridotaenia*; *Chrysodema sumptuosa*; *Chrysodema sonnerati*; jewel beetles; Africa; Australasia; eastern Palaearctic; Oriental region.

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1. Laporte & Gory (1835, p. 1) introduced the generic name *Chrysodema* including 33 nominal species and their diagnoses, descriptions and illustrations. The first two species listed were *C. sumptuosa* (p. 2) from Ind(es)–Or(ientales): Singapore and *C. sonnerati* (p. 3) from Indes–Orientales. *Chrysodema sumptuosa* was subsequently designated as the type species of *Chrysodema* by Duponchel (1843, p. 653).

2. The generic name *Iridotaenia* was introduced by Deyrolle (1864, p. 25) with a diagnosis, and a key to 11 nominal species. The first species listed was *Chrysodema sumptuosa* Laporte & Gory, 1835. Kurosawa (1982, p. 192) subsequently designated *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema* and (p. 188) designated *C. sumptuosa* as the type species of *Iridotaenia*, apparently unaware that Duponchel had designated it as the type species of *Chrysodema*. *Chrysodema sonnerati* has been included in *Chrysodema* since its original publication.

3. The composition of these two genera has varied over time, but almost all authors subsequent to Deyrolle (1864) have followed his use of the name *Iridotaenia* for the genus which includes *Chrysodema sumptuosa* (see, for example, Saunders, 1871, pp. 13–15; Kerremans, 1892, pp. 37–42; 1903, pp. 72–76; 1909, pp. 445–583; and Obenberger, 1926, pp. 125–135). The only exception was Gemminger & Harold (1869, p. 1356) who included both genera in *Chalcophora* Dejean, 1833. At present the name *Chrysodema* refers to a genus of 100 species found in the Australasian, Oriental and eastern Palaearctic regions and *Iridotaenia* refers to a genus comprised of 80 species from the tropical African, Australian and Oriental regions (for example

see Bellamy, 1985, 1986; Hołyński, 1993; and Volkovitsh, 2001). To apply the Principle of Priority would disturb accustomed usage of two generic names that have been accepted since Deyrolle (1864). Recognition of *Chrysodema sumptuosa* as the type species of *Chrysodema* would result in the loss of the name *Iridotaenia* as a junior objective synonym of *Chrysodema* under Article 61.3.3 of the Code. All species presently known by the name *Iridotaenia* would be called *Chrysodema* and all species presently known as *Chrysodema* would require a new generic name. This would cause considerable confusion. Recent publications in which the name *Chrysodema* has been used in the sense of *C. sonnerati* as the type species include Hołyński, 1994, 1997 and Bily & Volkovitsh, 1996. Examples demonstrating the current usage of the name *Iridotaenia* are Tôyama, 1987 and Hołyński, 2001. The tribe name IRIDOTAENINI was introduced by Tôyama (1987, pp. 5–6) based on *Iridotaenia* Deyrolle, 1864.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Chrysodema* Laporte & Gory, 1835 and to designate *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Chrysodema* Laporte & Gory, 1835 (gender: feminine), type species by designation in (1) above *Chrysodema sonnerati* Laporte & Gory, 1835;
  - (b) *Iridotaenia* Deyrolle, 1864 (gender: feminine), type species by designation by Kurosawa (1982) *Chrysodema sumptuosa* Laporte & Gory, 1835;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *sonnerati* Laporte & Gory, 1835, as published in the binomen *Chrysodema sonnerati* (specific name of the type species of *Chrysodema* Laporte & Gory, 1835);
  - (b) *sumptuosa* Laporte & Gory, 1835, as published in the binomen *Chrysodema sumptuosa* (specific name of the type species of *Iridotaenia* Deyrolle, 1864).

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*Chrysodema sonnerati* Laporte & Gory, 1835. Type specimen in Muséum National d'Histoire Naturelle, Paris. Body length: 25 mm. Photograph: T. Lander.